

**THE FRAGILE FAMILIES AND
CHILD WELLBEING STUDY:
QUESTIONS, DESIGN, AND A FEW
PRELIMINARY RESULTS**

**Center for Research on Child Wellbeing
Working Paper #00-07**

Sara McLanahan

Irwin Garfinkel

**The Fragile Families and Child Well-Being Study:
Questions, Design, and a Few Preliminary Results**

Sara McLanahan
Princeton University
E-mail: mclanaha@princeton.edu

Irwin Garfinkel
Columbia University
E-mail: ig3@columbia.edu

May 2000

An earlier version of this paper was presented at the Institute for Research on Poverty Conference on Nonmarital Fertility, April 1999, Madison, Wisconsin.

IRP publications (discussion papers, special reports, and the newsletter *Focus*) are available on the Internet. The IRP Web site can be accessed at the following address: <http://www.ssc.wisc.edu/irp/>

Abstract

Nonmarital childbearing is important because it is increasing and because there is concern (and some evidence) that it is damaging to children and perhaps parents as well. We refer to the unions of unwed parents as fragile families because they are similar to traditional families in many respects, but more vulnerable. Most people believe that children in fragile families would be better off if their parents lived together and their fathers were more involved in their upbringing. Indeed, public policy is now attempting to enlarge the role of unwed fathers both by cutting public cash support for single mothers and by strengthening paternity establishment and child support enforcement. Yet the scientific basis for these policies is weak. We know very little about the men who father children outside marriage, and we know even less about the nature of their relationships with their children and their children's mothers.

The Fragile Families and Child Wellbeing Study (FFS) is designed to remedy this situation by following a new birth cohort of approximately 4,700 children, including 3,600 children born to unmarried parents. The new data will be representative of nonmarital births in each of 20 cities and in U.S. cities with populations over 200,000. Both mothers and fathers will be followed for at least 4 years, and in-home assessments of children's health and development will be carried out when the child is 4 years old. The survey is designed to address the following questions: (1) What are the conditions and capabilities of new unwed parents, especially fathers? (2) What is the nature of the relationships in fragile families? (3) What factors push new unwed parents together and what factors pull them apart? In particular, how do labor markets, welfare, and child support public policies affect family formation? (4) How do children fare in fragile families and how is their well-being affected by parental capacities and relationships, and by public policies?

The paper discusses what we know about each of these questions and how the FFS addresses each of them. It also presents preliminary findings based on data from Austin, Texas, and Oakland, California.

The Fragile Families and Child Well-Being Study: Questions, Design, and a Few Preliminary Results

I. INTRODUCTION

Nonmarital childbearing is important because it is increasing and because there is concern (and some evidence) that it is damaging to children and perhaps parents as well. A third of all children born in the United States today are born to unmarried parents, and the proportions are even higher among poor and minority populations: 40 percent among Hispanics and 70 percent among African Americans (Ventura et al., 1995). Out-of-wedlock childbearing is occurring with increasing frequency in nearly all Western industrial countries. Indeed, the proportion of out-of-wedlock births is higher in the Scandinavian countries than it is in the United States (Ventura et al., 1995). The ill effects of father absence on children are documented in Sara McLanahan and Gary Sandefur's *Growing Up with a Single Parent* (1998) and in Andrew Cherlin's presidential address to the Population Association of America (Cherlin, 1999). Linda Waite documented the benefits of marriage for adults in her PAA presidential address a few years ago (Waite, 1995), and George Akerlof has recently written about the social costs of "Men without Children" in his lecture to the Royal Economic Society (Akerlof, 1998).

One set of scientific questions that needs to be addressed concerns the causes of nonmarital childbearing and the effects of public policies on birth rates. Another set of questions concerns the nature of nonmarital childbearing and its consequences for parents and children. In this paper, we describe a new study—the Fragile Families and Child Wellbeing Study—designed to address the second set of questions. We refer to the unions of unwed parents as fragile families because they are similar to traditional families in many respects, but more vulnerable.

Most people believe that children in fragile families would be better off if their parents lived together and their fathers were more involved in their upbringing. Indeed, public policy is now attempting to enlarge the role of unwed fathers by cutting public cash support for single mothers and by

strengthening paternity establishment and child support enforcement. Yet the scientific basis for these policies is weak. We know very little about the men who father children outside marriage, and we know even less about the nature of their relationships with their children and their children's mothers.

The Fragile Families and Child Wellbeing Study (FFS)¹ is designed to remedy this situation by following a new birth cohort of approximately 4,700 children, including 3,600 children born to unmarried parents. The new data will be representative of nonmarital births in 20 cities, including all U.S. cities with populations over 200,000. Both mothers and fathers will be followed for at least 4 years, and in-home assessments of children's health and development will be carried out when the child is 4 years old. The survey is designed to address the following questions:

- \$ What are the conditions and capabilities of new unwed parents, especially fathers? How many of these men hold steady jobs? How many are potentially dangerous to the mother and children?
- \$ What is the nature of the relationships in fragile families? How many couples are involved in stable, long-term relationships? How many fathers are involved with their children?
- \$ What factors push new unwed parents together and what factors pull them apart? How do labor markets, welfare, and child support public policies affect family formation?
- \$ How do children fare in fragile families?

The next section discusses what we know and do not know about each of these questions. The third section explains how the FFS addresses each of the questions. The fourth section presents some

¹Sara McLanahan (Princeton University) and Irwin Garfinkel (Columbia University) are principal investigators. Jeanne Brooks-Gunn (Columbia) and Marta Tienda (Princeton) are co-investigators, and Angus Deaton and Burton Singer are statistical consultants. Nancy Reichman is the project director. Other co-investigators include a network of (primarily) minority scholars at seven universities and research institutes (Sheila Ards at Benedict College, Waldo Johnson at the University of Chicago, Yolanda Padilla at the University of Texas, Lauren Rich at the University of Pennsylvania, Mark Turner at the Urban Institute, Melvin Wilson at the University of Virginia, and Maureen Waller at the Public Policy Institute of California). Funding for the Fragile Families and Child Wellbeing Study comes from several national and local foundations—including the Ford Foundation, the Robert Wood Johnson Foundation, W. T. Grant, the Public Policy Institute of California, the Hogg Foundation, St. David's Hospital Foundation in Austin, the Commonwealth Fund, the Fund for New Jersey, and the Healthcare Foundation of New Jersey—and from the National Institute of Child Health and Human Development.

preliminary findings based on data from two cities—Austin, Texas, and Oakland, California. The fifth section offers some preliminary conclusions.

II. THE QUESTIONS

The Conditions and Capabilities of Unwed Parents

The FFS will provide important new information on unmarried mothers. However, its major contribution will be to describe the characteristics and capabilities of unmarried fathers. Researchers and policymakers are especially interested in two aspects of fathers' capabilities: their earnings capacity and their propensity for violence. These two factors are fundamental to the success or failure of the new welfare and child support laws that envision a greater role for fathers in supporting their families.

The best evidence we have to date suggests that men who father children outside marriage are younger and less educated than men who father children within marriage (Garfinkel, McLanahan, and Hanson, 1998). They also work fewer hours and have lower hourly wages. Not surprisingly, the annual income of the average unmarried father (between \$15,000 and \$25,000) is much lower than the income of the average married father (\$42,000).

Clearly, most mothers and children would be better off economically if nonresident fathers paid more child support. However, some advocates for women fear that forcing fathers to pay child support may have serious negative consequences. Much of this concern is grounded in the belief that a substantial number of nonresident fathers have serious mental health problems, problems with drug and alcohol abuse, and/or problems with physical abuse and violence.

Four recent studies suggest that domestic violence among poor women and women on welfare is very high, with current prevalence ranging from 15 percent to 32 percent and lifetime prevalence ranging from 34 percent to 65 percent (Raphael and Tolman, 1997). We must approach these figures cautiously, however, since the statistics are based on special populations (i.e., welfare mothers) and do not

distinguish between biological and social fathers. Moreover, estimates based on nationally representative data suggest that while unmarried fathers report more mental health problems and more problems with drugs and alcohol than married fathers, the overall prevalence of these problems is still very low (Garfinkel, McLanahan, and Hanson, 1998). According to data from the National Survey of Families and Households (NSFH), only 11 percent of unwed fathers report being depressed, and only 7 percent report having drug or alcohol problems.

Most estimates of unwed fathers' earnings (and other characteristics) are seriously limited by the fact that these men are underrepresented in national and local surveys. Cherlin and colleagues were the first to note this problem (Cherlin, Griffith, and McCarthy, 1983). As many as 3.8 million nonresident fathers are not represented in the NSFH survey, which arguably provides the best data in the United States for studying family relationships (Garfinkel, McLanahan, and Hanson, 1998).² About a third of the "missing fathers" are not included in the sampling frame because these men are in prison, in the military, or, most important, not counted by the decennial census. The other two-thirds are in the survey but do not acknowledge their status. The "missing fathers problem" is especially serious for low-income fathers and for men who father children outside marriage (also see Rendall et al., 1997, and Sorensen, 1995).

The FFS will provide better information than previous studies on the earnings and personal problems of unwed fathers. First, the sample of fathers will be more representative of unwed fathers because it will start with the birth of the child and therefore will identify a specific universe of unmarried fathers. Second, the information will be more accurate because the fathers will be interviewed directly and followed over time. Finally, the information will be more complete because data on fathers will be collected from all the mothers, meaning that researchers will know something about the characteristics of the men who do *not* participate in the study.

²Nonresident father status is also underreported in the National Longitudinal Study of Youth (NLSY), though the proportion of underreporting is somewhat lower.

Relationships in Fragile Families

Two questions about relationships in fragile families are of great interest to researchers and policymakers. The first concerns the relationship between the father and mother. How many of these new parents are involved in a stable, “marriage-like” relationship? What are their expectations for marriage? The second question concerns the relationship between fathers and children. How do fathers see their new responsibilities? Do they want to help raise their children? Do mothers want them involved?

Fathers and Mothers. Demographers estimate that about 25 percent of all nonmarital births during the 1980s were to cohabiting parents, two-thirds of whom eventually married (Bumpass and Sweet, 1989). More recently, estimates suggest that as many as 40 percent of unwed parents are living together when their child is born (Bumpass and Lu, 1998; McLanahan et al., 1998). The recent figures suggest that the U.S. pattern of nonmarital childbearing is converging with that of the European countries, where the vast majority of unwed parents live together in marriage-like relationships.

To date, the literature on unwed parents in the United States presents several conflicting pictures about the nature of the relationship between unwed parents. Anderson (1989) describes how young, inner-city men exploit young women to satisfy their sexual needs and gain status with their peers. In contrast, Edin (1997) suggests that, in many instances, mothers refuse to marry the fathers either because the men are seen as unreliable breadwinners or because the fathers have serious problems with drugs or alcohol.³ These two stories are different with respect to which parent is making the decision. They are quite similar, however, with respect to the fact that marriage is not part of the future. Other researchers present a more cooperative picture, suggesting that many unwed couples start out with high hopes for maintaining a stable relationship only to find that they (or their partners) cannot meet their earlier expectations (Edin and Lein, 1997; Furstenberg, Sherwood, and Sullivan, 1992). In his famous study of street-corner life,

³Willis (1996) offers an economic explanation for the same behavior. He argues that unmarried women allow men to “free ride” (in terms of supporting their children) when there is a surplus of women and when women have an alternative source of support (e.g., welfare).

Liebow (1967) argues that men who are unable to provide economic support for their families disengage as a way of minimizing feelings of inadequacy.

Fathers and Children. Many of our ideas about the relationship between unwed fathers and their children come from research on divorced and separated fathers. According to this literature, most nonresident fathers do not provide adequate or regular child support and do not maintain regular contact with their children. Moreover, financial support and visitation are known to fall off rapidly over time. Whereas formal child support agreements are even less common with never-married fathers than with formerly married fathers, informal support, especially the purchase of goods and services for the child, appears to be very common (Edin and Lein, 1997; Waller, 1997; Marsiglio and Day, 1997). Father-child contact is also quite high. Analyses of the NLSY-Child Supplement data suggest that half of nonresident, unwed fathers see their child at least once a week and that most of these relationships are quite stable (McLanahan et al., 1997). The high level of involvement among new unwed fathers is probably due to the fact that many of these men are still romantically involved with the mothers. Thus the comparison with divorced and separated fathers may not be appropriate. When and if the relationship with the mother ends, an unwed father's involvement may drop off rapidly, as it does among divorced fathers.

How do unwed parents see the role of fathers? Until recently, most child development experts have taken a rather narrow view of the father-child relationship, treating fathers primarily as breadwinners and viewing their influence on children as indirect via the mother (McLoyd, 1990; Bronfenbrenner, 1986; Lamb, 1986; Parke, 1995). An emerging literature on married fathers questions this assumption and is beginning to identify the numerous ways in which fathers can be involved in child rearing: providing economic support, nurturing and caregiving, engaging in leisure and play activities, providing moral guidance and discipline, ensuring the safety of the child, and tying the child to the community (Marsiglio and Day, 1997). The new conceptualization is very useful in helping us identify the multiple domains of father involvement, and they can easily be extended to research on unmarried fathers. In fact, the few ethnographic studies that have looked at unwed fathers report that many of these men are describing their

roles in terms similar to those used by married fathers (Waller, 1997; Furstenberg, Sherwood, and Sullivan, 1992).

Despite the new images of fatherhood, being the breadwinner continues to be central to the meaning of fatherhood for most men and women, and a father's ability to fulfill the breadwinner role continues to be a strong predictor of his relationship with his child. Fathers who are unable to live up to the breadwinner ideal are less likely to find the father role rewarding and more likely to withdraw from their children in order to save face.

The FFS will collect information from both parents about their views of marriage and the factors they see as important for a successful marriage. The survey will also collect information on parents' expectations about fathers' rights and obligations. These new data will allow researchers to determine if unmarried parents are rejecting marriage or if marriage is a desirable goal that is simply beyond their reach.

The Role of Local Policies and Labor Markets

Economic theory and common sense suggest that strong labor markets, strict child support enforcement, and meager welfare benefits promote marriage (Garfinkel and McLanahan, 1986).⁴ Poor employment opportunities for men undermine marriage by making males less attractive and reliable husbands. To the extent that poor employment prospects discourage marriage more than childbearing,

⁴Though economic theory does not yield general conclusions about the effects of stronger child support enforcement on nonmarital births or divorce, in conditions which pertain in the United States today, theory predicts deterrence effects. Stronger enforcement increases the income of the custodial or resident parent and reduces the income of the nonresident parent. To simplify, yet account for most cases, we call resident parents mothers and nonresident parents fathers. If child support enforcement is tougher, mothers will be more prone to parent a child out of wedlock and to divorce, while fathers will be less prone to do either. Which effect will dominate cannot be ascertained in general, but Nixon (1997) shows that, if there is a welfare or public assistance system, theory predicts stronger enforcement will reduce divorce. Similarly, Willis (1996) finds that in the presence of welfare and a shortage of males, theory predicts stronger enforcement will reduce nonmarital births. One simple though not quite full story is that among couples where the mother would go on welfare if she had a nonmarital birth or divorced, welfare removes or at least reduces the benefit of strong enforcement. Thus the effects of enforcement on the incomes of these mothers and fathers is asymmetrical. In short, previous research suggests that in conditions which

they promote out-of-wedlock births. Generous welfare benefits limited to single mothers undermine marriage and promote out-of-wedlock childbearing both by making women more able to afford to be a lone mother and by reducing the gains from marriage. Strict child support enforcement in the presence of a welfare system increases the costs to fathers of living apart from their children more than it increases the benefits to mothers. The magnitude of these effects is an empirical question of great practical concern.

Obtaining reliable estimates of the labor market effects on marriage has been difficult. Wilson (1987) argues that the decline in marriage among black men is due largely to their declining opportunities in the labor market. Lichter, LeClere, and McLaughline (1991) and Mare and Winship (1991) find some support for the Wilson hypothesis. However, they also find that declining employment accounts for only about 20 percent of the decline in marriage. Moreover, as Schultz (1994) argues, it is difficult to disentangle the positive effects of earnings on marriage from the positive effects of marriage on earnings (Korenman and Neumark, 1991). By concentrating observations in cities with vastly different labor markets, by following parents over time as labor markets change, and by measuring determinants of cohabitation and marriage that are omitted in most studies, the FFS will help to disentangle these effects.

On balance, previous research suggests that higher welfare benefits modestly increase single parenthood. (For reviews of this literature, see Garfinkel and McLanahan, 1986; Moffitt, 1992; Moffitt, 1998.) There is also an emerging body of research which finds that stringent child support enforcement reduces marital disruption (Nixon, 1997) and out-of-wedlock childbearing (Case, 1998; Garfinkel et al., 1999; Plotnick et al., 1999). Previous research has not addressed the question of whether the generosity of welfare and stringency of child support enforcement interact. This is an important question because an interaction between two relatively modest effects could produce a large effect. By concentrating observations in cities with extreme child support and welfare environments, the FFS will facilitate the detection of such interaction effects.

The survey of fragile families will provide important new information about how recent changes in welfare and child support policies affect unwed parents and their children. Bane and Ellwood (1994) have shown that young unwed mothers have the longest stays on welfare of all single mothers. The federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 is designed to reduce this dependence by forcing mothers into the labor force and by forcing fathers to assume financial responsibility for their children. These changes are likely to provide stronger incentives for parents to remain together. Mothers on welfare who are required to work may prefer to live with the child's father, rely on his income, and stay at home; other mothers may want to live with the father, rely on his income, and supplement the family's income by working part-time. A mother on welfare will also have a stronger incentive to live with the child's father if she believes that he will be able to provide long-term economic support beyond the new 5-year time limit for welfare benefits. Similarly, some fathers who find it difficult to avoid paying child support under the new rules for establishing paternity may decide to live with the mother and child rather than pay child support. Fathers, like mothers, may also be concerned about the economic well-being of their children beyond the 5-year time limit. Of course, other fathers may make a more determined effort to evade the child support enforcement system. In short, we believe there will be stronger incentives under the new rules for mothers to live with the fathers of their children, and stronger incentives for at least some fathers to live with the mothers and children. If these hypotheses are correct, and if parents who live together produce an environment for better child outcomes, we would find that strong enforcement of welfare and child support regulations improves the well-being of children. On the other hand, it is possible that stronger enforcement of both welfare and child support regulations will simply further impoverish both mothers and fathers and/or increase parental conflict, leaving children worse off.

Child Well-Being

We know quite a lot about children who are exposed to divorce and remarriage, but we know much less about children born to unwed parents. This is because most surveys do not capture either the complex cohabitation histories of unwed parents or the complex “visiting” relationships these parents are often engaged in. A question that we eventually hope to shed some light on is whether a child is better off being raised by one parent in a stable environment or being raised by both parents in an unstable environment. By unstable, we mean a situation in which either the father is moving in and out or other men are moving in and out.

Much of what we know about children born outside marriage comes from birth cohort studies (Kiernan et al., 1976; Chase-Lansdale, Cherlin, and Kiernan, 1995; Broman, Nichols, and Kennedy, 1975; McCormick et al., 1992), studies of single mothers (McLanahan and Sandefur, 1994), and studies of teen mothers and low-income families (Furstenberg 1976; Hofferth and Hayes, 1987; Duncan and Brooks-Gunn, 1997). This body of research indicates that children born to unmarried parents are disadvantaged across a broad range of outcomes. They have higher rates of low birth weight and infant mortality, they score lower on tests of cognitive ability (math and verbal), and they exhibit more behavioral problems in early and middle childhood. As adolescents and young adults, these children have higher rates of delinquency and teenage pregnancy, lower educational attainment, and more problems finding and keeping steady jobs. They also exhibit more mental health problems (Chase-Lansdale, Cherlin, and Kiernan, 1995).

Even so, many children are surprisingly resilient. The Baltimore study of teen mothers (Furstenberg, 1976; Furstenberg, Brooks-Gunn, and Morgan, 1987) and the Kauai study (Werner and Smith, 1982) demonstrate that some children who are exposed to multiple risks during childhood, including father absence and poverty, overcome these obstacles and even thrive. The stability of the relationship with the primary caregiver and close ties with extended kin or other significant adults (e.g., teachers, mentors) appear to be major factors in determining resilience (Furstenberg, Levine, and Brooks-

Gunn, 1990; Furstenberg, Hughes, and Brooks-Gunn, 1992; Werner and Smith, 1982). This research informs our study by noting the importance of the stability of caretakers and mentors outside the child's immediate household.

A major limitation of all these studies is that one cannot be certain that the disadvantages associated with being born to unmarried parents are not due to some unmeasured characteristics of the parents that predate the child's birth. It is possible, and even likely, that parents who make a long-term commitment are different in some important ways from parents who never marry or who marry and then divorce. They may have better relationships with each other, their attitudes about family and parenting may be different, or they may have fewer personal problems (e.g., substance abuse).

By following children born to unmarried parents from birth and by collecting information on initial health status, parental commitment and relationships, and changes in family relationships and economic circumstances, the FFS will give us insight into the mechanisms at play. One of our key interests is whether children raised in stable environments with low levels of parental time and money are better off than children raised in unstable environments with higher levels of resources (Rosenblum and Pauly, 1984; Elder, 1974; Conger and Elder, 1994). We are also interested in the contrast between children born to unmarried parents and children born to married parents who subsequently divorce. Which of these arrangements is more stable for the child? Which leads to more successful child development?

III. THE DESIGN

Data for the Fragile Families and Child Wellbeing Study are being collected in 20 U.S. cities, stratified by labor market conditions, welfare policies, and child support policies. The geographical dispersion of the cities is depicted in Figure 1. The sample is representative of nonmarital births in each

Figure 1

city and is nationally representative of nonmarital births to parents residing in cities with populations over 200,000. A comparison group of married parents is also being followed. The total sample size is approximately 4,700 families, including 3,600 unwed couples and 1,100 married couples.

New mothers are interviewed at the hospital within 24 hours of giving birth. Based on our initial data-collecting results, we also expect to interview between 50 and 60 percent of the unmarried fathers at the hospitals. The rest of the fathers will be interviewed as soon as possible after the birth. Follow-up interviews with *both* parents will be conducted when the child is 12, 30, and 48 months old. Data on child health and development will be collected each year from the mother; in addition, in-home assessments of child well-being will be carried out at the last interview.

The baseline questionnaires for mothers and fathers include sections on (1) prenatal care, (2) mother-father relationships, (3) expectations about fathers' rights and responsibilities, (4) attitudes toward marriage, (5) parents' health, (6) social support and extended kin, (7) knowledge about local policies and community resources, and (8) education, employment, and income. Follow-up interviews will gather additional information on (1) access to and use of health care and child care services, (2) experiences with local welfare and child support agencies, (3) experience with the criminal justice system, and (4) parental conflict and domestic violence.

Sampling from Births and Interviewing in the Hospital

Sampling from births at hospitals is an excellent method of obtaining a representative sample of children born outside marriage and their unwed mothers, and a "nearly" representative sample of unwed fathers. Such a sample is ideal for addressing our first and fourth questions regarding the capabilities of the parents and the well-being of the children. Though the sample of fathers is only "nearly" representative, the mother sample allows us to assess any limitations and to at least partially redress them. To ascertain the extent to which the interviewed and non-interviewed fathers differ, all the mothers are

asked a series of questions about the fathers. Two particular foci are fathers' earnings and domestic violence.

Birth cohorts are an excellent data source for studying the determinants of child well-being. Over time, they become increasingly helpful for separating out the effects of preexisting differences, such as health at birth, from current differences, such as parenting practices, income or welfare levels, and the rigor of child support enforcement. The FFS starts with a birth cohort, not only because this approach increases our chances of getting to the fathers, but also because it allows us to gather as much information as possible on the *initial conditions* of the child.

Two important reasons for sampling from hospitals rather than from birth records are higher response rates and lower costs. Levine and Bryant (1997) note that in 1988 the NCSS, which sampled from birth records, was able to locate and complete interviews with only 80 percent of mothers. Presumably, the response rate was even lower for nonmarital births. In Oakland and Austin, we have been able to interview about 93 percent of the mothers and close to 60 percent of the fathers *at the hospitals*. Another 15 to 20 percent of the fathers were interviewed outside the hospitals for a total response rate of 75 percent. With respect to costs, interviewing in the hospital costs substantially less than conducting in-home interviews. Normally, because both the mother and father must be interviewed and because there will be more than one birth per day, more than one interview can be conducted per hospital visit by a field worker. In-home interviews require a substantial amount of time for locating the subject, scheduling, and travel. However, we have discovered that the cost of gaining access to hospitals is quite substantial.⁵

⁵Two staff members spent nearly a full year each working with doctors, nurses, and institutional review boards to secure permission for us to interview parents in the hospital.

Including Cities with Extreme Conditions

The 16 cities in our nationally representative sample were chosen on a random stratified basis from all cities with populations over 200,000. (In addition to these 16 cities, the FFS is being conducted in four other cities with funding from foundations interested in those particular cities.) Prior to random selection, all cities with populations greater than 200,000 were stratified into nine cells. Cities were ranked in terms of the strength of their labor markets, the strictness of child support enforcement, and the stinginess of their welfare grants. Cities in the top or bottom third in all three distributions formed eight of the nine cells. Cities that fell in the middle on one or more dimensions formed the ninth cell. One city was selected randomly from each of the eight extreme cells, and eight cities were selected randomly from the remaining cell. The sample size in each of the extreme cells is 325 births (250 nonmarital and 75 marital births); the sample size in the middle cell is 100 births (75 nonmarital and 25 marital births).

There are three reasons for concentrating observations in cities with more extreme environments. First, city environments vary dramatically in a number of ways that are likely to affect individual behavior and family relationships. The effects of environmental influences such as labor markets, child support and welfare policies, sex ratios, and race/ethnic composition are not well understood and could easily interact with one another and with individual-level variables in our models. The generosity of welfare, for example, might have a weak effect on marriage in the context of a strong labor market and strong child support enforcement, but a strong effect in the face of a weak labor market and lax child support enforcement. Similarly, in cities with low welfare benefits and low unemployment, individual values with regard to marriage and cohabitation may be a very important determinant of cohabitation, whereas in cities with high benefits and high unemployment, such values may play little or no role. Having a large sample in eight cities allows us to study the processes that determine adult relationships and the effects of these relationships on well-being in each city. In effect, we will have eight case studies. Concentrating observations in eight cities will also allow us to test for whether there are differences across cities in the mean values and effects of different variables.

Second, concentrating observations allows us more accurately to describe the environment in each city. This is especially important for measuring welfare and child support regimes. Administrative record data do not provide population-based information, and they are likely to provide inconsistent information on some variables, such as sanction rates. They also provide no information on still other variables, such as knowledge. Large national data sets like the Current Population Survey (CPS) provide large enough samples in some states to aggregate to the state level. However, our experience with the Child Support Supplement to the CPS (which has 4,000 observations per year) indicates that even after pooling 3 years of data, we have very large standard errors in most states. Moreover, although welfare and child support policies are made at the state level, these policies are implemented at the local level. Thus, getting an accurate description of the welfare and child support regimes at the city level is important and requires a large city sample.

Third, the most efficient design for detecting the effects of differences in child support, welfare, and labor market regimes is to concentrate observations in cities with extreme values (i.e., those with the highest and lowest welfare benefit levels and the strongest and weakest child support and labor market regimes).⁶ By maximizing the variance in these explanatory variables, we minimize the variance of their estimated coefficients.⁷

If we were to sample only from the eight cities that maximize regime variation, however, it would be more difficult to detect nonlinearities in the effects of welfare, child support, and labor markets. It would also be harder to detect the effects of other city-level variables. Nor would the FFS be representative of a national population. We resolved this trade-off by drawing a nationally representative

⁶See Conlisk and Watts (1969) for a similar approach and Morris et al. (1980) for a more skeptical view. Duncan and Raudenbush (1997) present a similar justification (maximizing variance) for the utility of cross-national studies. For a textbook discussion, see Groves (1989).

⁷We estimate that for estimating the effect of welfare, placing all of the observations in eight cities rather than distributing them equally across 16 cities increases efficiency by 34 percent. The gain in efficiency from concentrating in eight cities versus using a nationally representative sample would of course be even larger. The

sample of nonmarital births in cities with populations over 200,000 from 16 cities and by oversampling in eight cities that maximize welfare, child support, and labor market regime variation. Adding the eight cities with smaller samples to the eight cities with large samples allows us to detect the effects of other city-level variables and nonlinearities and to be nationally representative of unwed births in large cities while increasing the data collection budget by only about 25 percent. Concentrating observations in cities with extreme environments weakens the descriptive power of the nationally representative sample, but it strengthens our ability to detect the effects of labor markets, child support, and welfare, and to detect interaction effects among these policies.

IV. PRELIMINARY RESULTS

This section summarizes what we have learned from our initial analysis of the first wave of data collected in Austin, Texas, and Oakland, California, in spring 1998.⁸ We begin by describing the characteristics of the new unmarried parents in Austin and Oakland to gain a better sense of their needs as well as their capabilities and constraints. We are particularly interested in parents' *human capital*—age, education, work experience, and health status—and their obligations to other children. These indicators can reveal a great deal about parents' ability to support themselves and their new baby. We also are interested in the cultural backgrounds of new parents—ethnicity, religion, and immigrant status—since these are likely to affect access to public and private resources.

gain in efficiency from our actual allocation of 325 observations in eight large cities and 100 in eight small ones versus an equal distribution across all 16 cities is 12 percent.

⁸Each city sample contains 325 families—250 unmarried couples plus 75 married couples who serve as a comparison group. Data were collected in Oakland at Summit and Highland hospitals from February 14 through June 15, 1998, and in Austin at all birthing hospitals from April 9 through June 30. Mothers giving birth during this time were approached in the hospitals and asked to participate in the study. Approximately 93 percent of the mothers agreed to participate. Mothers were asked to provide locating information on the fathers, and fathers were contacted either in the hospitals or as soon as possible after the child's birth. Approximately 90 percent of married fathers and 75 percent of unmarried fathers agreed to participate in the study. The mother's interview lasted about 30 minutes and the father's interview lasted about 40 minutes.

Table 1 presents profiles of mothers and fathers obtained from the baseline interviews. Since nearly all the mothers we approached in the hospitals agreed to participate in the study, and since we interviewed mothers in all of the birthing hospitals in each city, we are confident that our sample is representative of the population of unmarried women giving birth in both Austin and Oakland.⁹ We are less confident that our sample of unmarried fathers is representative, since we were able to interview only 75 percent of these men. Compared with the average unmarried father, the men in our sample are more strongly attached to the mothers of their children and are likely to differ in other ways as well. Anticipating this problem, we asked the mothers questions about the fathers of their children so that we could compare fathers who participated in the study with those who did not. The information in Table 1 about fathers' age, education, work status, race and ethnicity, and drug and alcohol problems is based on mothers' reports. Thus it characterizes all unmarried fathers. The rest of the information in Table 1 (immigration status, religion, number of children, and health status) is based on the self reports of the 75 percent of fathers who were interviewed.

Parents' Human Capital and Social Capital

The typical unmarried mother is in her early 20s. Nineteen percent to 24 percent are under 20 and 15 percent to 19 percent are over 30. For legal reasons, we did not include mothers under age 18 in our study.¹⁰ As a consequence, the unmarried mothers in our samples are slightly older than the actual

⁹At the time we conducted the survey, two hospitals (Highland and Summit) in Oakland delivered babies. However, before 1998, Kaiser Hospital in Oakland also performed deliveries. At the time of the study, women who were Kaiser patients were taken to Alta Bates Hospital in Berkeley for deliveries.

¹⁰To interview minor mothers, we would have needed to gain permission from the maternal grandparent. This extra step would have increased the cost of data collection and, most likely, would have reduced response rates. Young teen mothers are included in a few selected cities where hospitals requested that they be interviewed.

Table 1 here

Table 1 continued

population of new unmarried mothers. According to data computed by the National Center for Health Statistics, 30 percent of all births to unmarried mothers in the United States in 1996 were to women under 20, and 10 percent were to women under 18. Extrapolating these figures to Austin and Oakland, we estimate that our sample misses about 10 percent of new mothers by virtue of the age restrictions we impose on our sample (Ventura et al., 1997). The typical unmarried father is in his early 20s. Compared with the mother, he is less likely to be a teenager and more likely to be over 30. On average, the fathers are 2.5 to 2.8 years older than the mothers.

Lack of education is a serious problem for unmarried parents. Over 40 percent of the mothers and fathers lack a high school degree, and fewer than 30 percent have ever attended college. In Oakland the proportion of parents with any advanced education is even lower, about 17 percent for mothers and 20 percent for fathers. In today's world, where advanced training and education are increasingly important for employment and income stability, these numbers do not bode well for the future of these new parents.

In spite of their limited education, however, unmarried parents in Austin are strongly attached to the labor force. Eighty-seven percent of mothers and 85 percent of fathers were employed during the year prior to the birth of their child. These figures are much higher than the national employment rate of 74 percent reported in the National Survey of American Families (Urban Institute, 1999). We suspect that both the vibrant Austin economy (with an unemployment rate of 2.6 percent [Texas Workforce Commission, 1999]) and the meagerness of welfare benefits (Texas has the fourth lowest level of welfare benefits in the country [U.S. Congress, 1998]) are responsible for these high employment rates. By way of contrast, nearly a quarter of the fathers and 40 percent of the mothers in Oakland did not work in the year prior to their child's birth. Oakland's unemployment rate (3.9 percent) was quite a bit higher than Austin's, but it was still below the national average. California welfare benefits are among the most generous in the nation.

According to their own reports, about 60 percent of the mothers and fathers in Oakland and of the mothers in Austin and 73 percent of the fathers in Austin are in very good to excellent health. The national

averages for this age group are 74 percent for women and 72 percent for men (Benson and Marano, 1998). Because we interviewed the mothers shortly after they gave birth, we might expect their self-assessed health status to be a little lower than average. Austin mothers engage in reasonably good health practices. Ninety-six percent reported no drug use and 91 percent reported no alcohol use, but nearly 20 percent reported cigarette use. On a less positive note, many Oakland mothers reported using drugs (19 percent) and alcohol (17 percent) during their pregnancy. Six percent of mothers reported that drug or alcohol use is a problem in their lives.¹¹ About 24 percent of Oakland mothers and 19 percent of Austin mothers also reported smoking cigarettes during pregnancy. Cigarette smoking is strongly associated with low birth weight and other poor birth outcomes.

Not surprisingly, unmarried fathers are more likely than unmarried mothers to engage in risky health practices. They are more likely to use drugs and to smoke cigarettes, and they are much more likely to drink alcohol. In Austin, fathers are much more likely than mothers to have problems with drugs and alcohol, but in Oakland the rates are similar. Since most of the data on fathers' health status and health behavior came from the fathers' own reports, the figures in Table 1 are likely underestimate the true proportions. We suspect that the fathers who participated in our study have fewer problems with drugs and alcohol than the fathers who did not participate. This bias would not affect the estimate for *problems* with drugs and alcohol, however, since we used the mothers' responses to get this number.

Turning from the individual characteristics to the cultural backgrounds of our new parents, we find that over half of the new unmarried mothers in Austin are Hispanic and 30 percent are black, while in Oakland these figures are reversed. Our racial and ethnic percentages in Oakland are somewhat different from those reported by the California Health Department for births in Oakland in 1996. The latter show a

¹¹These numbers probably underestimate the use of drugs and alcohol since mothers may be reluctant to report behaviors that reflect negatively on their mothering skills.

higher proportion of births to blacks and a lower proportion of births to Hispanics.¹² The difference between the two sets of figures is probably due to the fact that black mothers are more likely than Hispanic mothers to be insured by the Kaiser Health Plan, and therefore to give birth outside of Oakland in 1998 (see note 9). The higher figure for Hispanic mothers in 1998 may also reflect trends in immigration. About 30 percent of the Oakland mothers in our sample are immigrants, primarily from Mexico. Consistent with African-American and Latino culture, respectively, about half of new Oakland parents report their religion as Protestant and almost 30 percent identify as Catholic, whereas in Austin, over 40 percent identify as Catholic. The percentage of parents reporting no religion is very small—10 to 16 percent.

Relationships in Fragile Families

The media often present negative stereotypes about unmarried parents, sometimes depicting babies as the products of casual sexual liaisons or depicting mothers as the victims of irresponsible fathers. For policymakers and program directors, getting the facts straight about the nature of parents' relationships is critical for designing effective programs and policies. If, for example, mothers and fathers are truly indifferent to one another, it makes sense to treat them as separate units. If, on the other hand, they are involved in marriage-like relationships, these policies and programs need to treat them as such or they may be ineffective or even undermine parents' relationships.

Mother-Father Relationships. Tables 2a and 2b present information on living arrangements, expectations, and attitudes about marriage, and on sources of conflict between unmarried parents in Austin and Oakland. We present information on three groups of mothers—all mothers, mothers for

¹²The figures for unmarried births from California vital statistics indicate that 61 percent of children delivered at Summit and Highland hospitals in 1997 were born to black mothers, 19 percent to Hispanic mothers, 5 percent to white mothers, and 14 percent mothers of other races. The figures from the Texas Department of Health in 1996 were 54 percent Hispanic, 28 percent black, 18 percent white, and less than 1 percent other.

Table 2a here

Table 2b here

whom a father interview was not completed, and mothers for whom a father interview was completed. By far the most striking finding is the high rate of cohabitation among these parents. In Oakland, about 47 percent of unmarried mothers are living with the father of their child at the time of their child's birth, and another 39 percent are romantically involved with the father but living apart. In Austin, the rate of cohabitation (56 percent) is even higher, though, interestingly, the proportion either cohabiting or romantically involved is lower—77 percent in Austin versus 86 percent in Oakland. The percentage with no relationship is also higher in Austin than in Oakland—14 percent versus 6 percent. Mothers without a father interview (column 2) are much less likely to be cohabiting and much more likely to report “no contact” with the father than are mothers with a father interview (column 3). The difference between column 2 and column 3 confirms our suspicion that the fathers who agreed to be interviewed are much more involved with the mothers than are the fathers who did not complete interviews.

About 70 percent of the unmarried mothers in both cities believe that their chances of marrying the father are 50 percent or better. When asked if they strongly agree, agree, disagree, or strongly disagree with the statement, *It is better for children if their parents are married*, 70 percent also said they agree or strongly agree. Fathers' responses are even more positive, which is what we would expect from our somewhat select sample. When we look at unmarried couples for whom we have two interviews in columns 3 and 4 (i.e., the mother and father of the same child were both interviewed), the fathers and mothers seem to be equally promarriage in Oakland whereas in Austin the fathers are a little more promarriage than the mothers.

There is strong consensus among these unmarried parents about what the qualities of a successful marriage are. When asked to identify the qualities important for a successful marriage, between two-thirds and three-quarters of the mothers rated *maturity* and *husband having a steady job* as very important. One-half rated *wife having a steady job* as very important. The fathers expressed values similar to those of the mothers, although they rated *maturity* and *husband having a steady job* a little higher and *wife having a steady job* a little lower than mothers did. They also rated *a good sex life* a little higher. Finally, when

asked about the level and sources of disagreement in their relationship during the past month, mothers identified *spending time together* and *money* as the major points of contention. Unmarried fathers reported slightly less conflict than the mothers (compare columns 3 and 4), but agreed that time and money were major sources of conflict.

Father-Child Relationships. The FFS examines several indicators of father involvement within fragile families, including whether the father's name will be on the birth certificate, whether the child will take the father's surname, whether the father helped the mother during her pregnancy, and whether the mother wants the father to be involved in raising the child. For each of these indicators, both mothers and fathers express high levels of intent for and interest in strong father involvement.

Those who believe that unmarried fathers are indifferent to their children will be surprised by the numbers in Tables 3a and 3b. Over 95 percent of the fathers indicated both that the father's name would be on the birth certificate and that the child would take the father's surname. Though lower, comparable figures for mothers' reports are still quite high—80 percent and 89 percent, respectively, in Austin and Oakland. The proportions of mothers who reported that the father gave money or bought things for the baby during the pregnancy or helped the mother in other ways are only somewhat lower. Finally, the overwhelming majority (89–93 percent) of unmarried parents, including mothers no longer romantically involved with their children's fathers, *want* the fathers to be involved in their children's lives. Again, fathers' responses to these questions need to be viewed in light of the fact that the unmarried men who participated in our study are probably more committed to the mothers and children than the average unmarried father. Even so, the mothers' responses to these questions, which do not reflect a select group of unmarried mothers, indicate very high levels of intended father involvement.

From a public policy perspective, these data are of tremendous import. Given that mothers *want* the fathers' assistance in raising their children, and given that fathers *want* to be a part of their children's

Table 3a here

Table 3b here

lives, policies and programs should facilitate, build upon, and maintain the commitment that unmarried fathers articulate at the “magic moment” of their child’s birth. At the same time, it is important to recognize that a small minority of mothers (8–11 percent) do not want the father involved in raising their child. In the follow-up survey, we will examine whether this reluctance may be due to past experiences with domestic violence.

The FFS seeks to generate a greater understanding of new parents’ perceptions of what being a father means as well as of the images of fatherhood that shape these perceptions. The results presented in Tables 4a and 4b, showing parents’ views about the characteristics of a “good” father, are especially interesting. When asked to rank the qualities of a good father, the majority of unmarried mothers identified *showing love and affection to the child* as the most important quality. Nearly 40 percent of unmarried fathers in Oakland and nearly 60 percent of unmarried fathers in Austin ranked this quality first as well. Similarly, when asked to name the least important characteristic, the mothers chose *authority, financial support, and direct care*. Again, the fathers agreed, although compared with the mothers, they attached somewhat less importance to fathers as authority figures and somewhat more importance to fathers as providers of direct care.

Private and Public Resources

Although it is too early to present any results on the roles of welfare, child support, and the labor market on the evolution of parental relationships, Table 5 presents information on parents’ access to and use of public and private resources. This information is important in determining the needs of these parents as well as their potential and actual sources of support. It is essential to ensuring that policies and programs complement rather than undermine existing family networks and community support networks.

Unmarried parents rely on multiple sources of income and in-kind support to help raise their children. According to Table 5, mothers’ median annual income was \$4,000 in Austin and \$5,000 in Oakland, while fathers’ income in both cities was \$12,500. The figure for fathers in our sample is likely

Table 4a here

Table 4b here

Table 5 here

to be somewhat higher than the figure for all unmarried fathers because the men in our sample are more likely to be employed (according to the mothers) and thus to have higher earnings.

Household income is substantially higher than personal income—about \$14,000 to \$16,000 (median) among the mothers and \$21,000 (median) among the fathers—reflecting the fact that most new unmarried parents are living with other adults. Even so, the vast majority of new parents live either below or just barely above the poverty line.¹³ Fifty-six percent of unmarried mothers in Oakland and 53 percent of mothers in Austin are poor (based on the official poverty line), and in both cities three-quarters of the mothers have incomes below 200 percent of the poverty line. The majority of these new parents have other children to support, which is taken into account by the poverty threshold.

The extended family is an important source of support for new unmarried parents. Nearly all unmarried parents said there was someone in their family to whom they could turn for help with financial problems, housing, or child care. Between 46 and 58 percent of the mothers had received financial support from relatives during the past year, over 40 percent had received help with housing, and over 33 percent had received free child care. Although the mothers were more likely than the fathers to rely on relatives, a substantial proportion of the fathers also received financial support and help with housing.

New unmarried parents in Oakland and Austin do not appear to have particularly strong ties to their neighborhoods or communities. In general, the longer a person lives in a neighborhood, the more likely it is that she (he) knows her (his) neighbors and will have them available as a source of support. As shown in Table 6, the average Austin mother has lived in her neighborhood about 2.5 years, while in Oakland the averages for mothers and fathers are 3 and 3.5 years. In addition to the length of residence in one's neighborhood, neighborhood quality can also impact the degree of interaction between neighbors and thus one's potential support from that source. Three-quarters of unmarried mothers and nearly 60

¹³The income of the Oakland mothers in our sample is probably somewhat lower than the income of all Oakland mothers giving birth in 1998 since our income figure does not include mothers who were in the Kaiser Health Plan.

Table 6 here

percent of unmarried fathers in Oakland characterized their neighborhoods as safe; the figure for both mothers and fathers in Austin was 82 percent.

Another potential source of community support is organized religion. Although 90 percent of the unmarried parents in our sample reported having a religion, only one-fifth of the mothers and 11–12 percent of the fathers said they attended church on a weekly basis.

A substantial proportion of unmarried mothers in both cities rely on government support. Forty-three percent of the mothers in Austin and 52 percent of those in Oakland had received welfare or food stamps during the past year. The proportions were even higher for women who had another child—53 percent and 62.5 percent.

Recent policy changes have shifted much of the responsibility for welfare from the federal government to the individual states, which differ in terms of their eligibility restrictions and work requirements for welfare recipients. Given these changes, it is important that welfare recipients or potential recipients understand the new policies in their respective states. We found that unmarried parents were woefully uninformed about the new welfare rules and regulations. Nearly half the mothers answered that they “do not know” how many years a women can receive welfare or how long she can receive benefits before having to work. The fathers were even less knowledgeable than the mothers about new welfare rules.

Over 60 percent of the Oakland parents and 90 percent of Austin parents reported receiving no information about establishing paternity at the hospital. It is possible that some parents may have received information after we spoke with them and others may not have understood the information presented to them. If some parents did not receive comprehensible information or did not receive any information at all, child support officials are missing a golden opportunity to give potentially valuable paternity information in a friendly and cost-effective manner.

How Children Are Doing?

Low birth weight is an important indicator of children's current and future health status. In Austin and Oakland, 10 percent and 13 percent, respectively, of the babies weighed less than 2,500 grams at birth. The 10 percent figure is slightly higher and the 13 percent figure is considerably higher than both the national average (7.4 percent) and the Texas and California averages for all births—7.2 and 6.1, respectively (Monthly Vital Statistics Report, 1996; Texas Department of Health, 1999; Rand California Statistics, 1998).

Nearly all the unmarried mothers reported receiving prenatal care, which is good news indeed. However, 20 percent of the Oakland mothers and 30 percent of the Austin mothers did not start receiving care until the second or third trimester of pregnancy. The latter is worse than the national average of 23 percent (Abma et al., 1997). The data on medical insurance coverage during pregnancy show that Medicaid (or Medi-Cal) is an important resource for unmarried mothers. In Austin, two-thirds of unmarried mothers are covered by public insurance, and the figure is over 90 percent for Oakland. One reason so few mothers in our Oakland sample were covered by private insurance is that mothers in the Kaiser Health Plan were sent to Alta Bates Hospital in Berkeley for their deliveries. Not surprisingly, the mothers with private health insurance were more likely to receive prenatal care during the first trimester than were mothers covered by Medicaid. The length of maternity stay in the hospital is another issue that has attracted much public attention. Although critics of "drive-through deliveries" argue for longer maternal stays, 72 to 80 percent of the mothers said they were ready to go home after a day or two and did not want to stay in the hospital any longer.

Finally, we asked the unmarried mothers who the baby was going to live with as a way of measuring the resources that would be available to the child over the near term. Going home meant very different things for these babies. Fifty to 60 percent were expected to live with their mother and father, 20 to 27 percent with the mother alone, and 20 to 25 percent with the mother and another adult. The differences between the two cities reflect the differences in cohabitation.

V. CONCLUSION

From our initial exploration of the Fragile Families and Child Wellbeing Study data from Oakland and Austin, three findings stand out. First, parents in fragile families in both cities are initially highly committed to each other and to their children. Half of unmarried parents live together, and another 30 percent are romantically involved. More than two-thirds expect to marry. Eight of ten fathers provided support during the pregnancy, and more than eight of ten mothers planned to put the father's name on the child's birth certificate. The overwhelming majority of mothers want the father to be involved in raising their child. The challenge for policymakers and community leaders is to nourish rather than undermine these commitments.

Second, most unmarried parents in both cities are poorly equipped to support their families. The typical father has an income of less than \$12,500 dollars a year, and the typical mother has only \$4,000 to \$5,000. The human capital of both parents is low. About half of both mothers and fathers lack a high school degree. Fewer than 20 percent have more than a high school degree. In Oakland, nearly one of four fathers and two of five mothers did not work in the previous year. Increases in human capital, employment, and earnings are likely to play critical roles in the success or failure of parents in maintaining stable families.

Finally, the majority of unmarried mothers in both cities are healthy and bear healthy children. However, 25 percent of these mothers do not receive prenatal care in the first trimester and more than 10 percent give birth to low-weight babies. Furthermore, 20 percent of mothers drink alcohol, use drugs, or smoke cigarettes during their pregnancies. Improving the health care of all mothers during pregnancy should be an important objective of local policymakers.

References

- Abma, J., A. Chandra, W. Mosher, L. Peterson, and L. Piccinino. 1997. "Fertility, Family Planning, and Women's Health: New Data from the 1995 National Survey of Family Growth." National Center for Health Statistics. *Vital Health Statistics* 23 (19): 93.
- Akerlof, G. A. 1998. "Men without Children." *Economic Journal* 108 (March): 287–309.
- Anderson, E. 1989. "Sex Codes and Family Life among Poor Inner City Youths." *Annals of the American Academy of Political and Social Science* 501: 59–78.
- Bane, M. J., and D. T. Ellwood. 1994. *Welfare Realities: From Rhetoric to Reform*. Cambridge, MA: Harvard University Press.
- Benson, V., and M. A. Marano. 1998. "Current Estimates from the National Health Interview Survey, 1995." National Center for Health Statistics. *Vital Health Statistics* 10 (199): 107.
- Bronfenbrenner, U. 1986. "Ecology of the Family as a Context for Human Development: Research Perspectives." *Developmental Psychology* 22: 723–742.
- Broman, S., P. Nichols, and W. Kennedy. 1975. *Preschool IQ: Prenatal and Early Development Correlates*. New York: John Wiley.
- Bumpass, L., and H. H. Lu. 1998. "Trends in Cohabitation and Implications for Children's Family Contexts in the U.S." Working Paper #98-15. Center for Demography and Ecology, University of Wisconsin–Madison.
- Bumpass, L. L., and J. A. Sweet. 1989. "National Estimates of Cohabitation." *Demography* 26: 615–625.
- Case, A. 1998. "The Effects of Stronger Child Support Enforcement on Non-Marital Fertility." In *Fathers under Fire: The Revolution in Child Support Enforcement*. New York: Russell Sage Foundation.
- Chase-Lansdale, P. L., A. J. Cherlin, and K. E. Kiernan. 1995. "The Long-Term Effects of Parental Divorce on Mental Health of Young Adults: A Developmental Perspective." *Child Development* 66: 1614–1634.
- Cherlin, A. J. 1999. *Going to Extremes: Family Structure, Children's Well-Being, and Social Science*. Presidential address at the Population Association of America annual meeting, New York City. March.
- Cherlin, A., J. Griffith, and J. McCarthy. 1983. "A Note on Maritally-Disrupted Men's Reports of Child Support in the June 1980 Current Population Survey." *Demography* 20: 385–389.
- Conger, R., and G. Elder, eds. 1994. *Families in Troubled Times: Adapting to Change in Rural America*. New York: Aldine de Gruyter.

- Conlisk, J., and H. Watts. 1969. "A Model for Optimizing Experimental Designs for Estimating Response Surfaces." *Proceedings of the Social Statistics Section*, American Statistical Association. Pp. 150–156.
- Duncan, G. J., and J. Brooks-Gunn. 1997. *Consequences of Growing Up Poor*. New York: Russell Sage Foundation.
- Duncan, G. J., and S. Raudenbush. 1997. "Getting Context Right in Quantitative Studies of Child Development." Paper prepared for presentation at conference on Research Ideas and Data Needs for Studying the Well-Being of Children and Families. October.
- Edin, K. 1997. "Why Don't Poor Fathers and Mothers Get Married?" Paper presented at the Urban Poverty Workshop, University of Chicago. March.
- Edin, K., and L. Lein. 1997. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work*. New York: Russell Sage Foundation.
- Elder, G. H., Jr. 1974. *Children of the Great Depression: Social Change in Life Experience*. Chicago: University of Chicago Press.
- Furstenberg, F. F. 1976. *Unplanned Parenthood: The Social Consequences of Teenage Parenting*. New York: Free Press.
- Furstenberg, F. F., J. Brooks-Gunn, and S. P. Morgan. 1987. *Adolescent Mothers in Later Life*. New York: Cambridge University Press.
- Furstenberg, F. F., J. Levine, and J. Brooks-Gunn. 1990. "The Children of Teenage Mothers: Patterns of Early Childbearing in Two Generations." *Family Planning Perspectives* 22 (2): 54–61.
- Furstenberg, F. F., K. Sherwood, and M. Sullivan. 1992. *Caring and Paying: What Fathers and Mothers Say About Child Support*. New York, Manpower Demonstration Research Corporation.
- Garfinkel, I., D. Gaylin, S. McLanahan, and C.-C. Huang. 1999. "Will Child Support Enforcement Reduce Nonmarital Childbearing?" Unpublished manuscript.
- Garfinkel, I., and S. McLanahan. 1986. *Single Mothers and Their Children: A New American Dilemma*. Washington, DC: Urban Institute.
- Garfinkel, I.; S. McLanahan, and T. Hanson. 1998. "A Patchwork Portrait of Nonresident Fathers." In *Fathers Under Fire: The Revolution in Child Support Enforcement*. New York: Russell Sage Foundation.
- Garfinkel, I., S. McLanahan, D. Meyer, and J. Seltzer, eds. 1998. *Fathers Under Fire: The Revolution in Child Support Enforcement*. New York: Russell Sage Foundation.
- Groves, R. M. 1989. *Survey Errors and Survey Costs*. New York: John Wiley.
- Hofferth, S. L., and C. D. Hayes. 1987. *Risking the Future*. Vol. II. Washington, DC: National Academy Press.

- Kiernan, K. E., J. R. T. Colley, J. W. B. Douglas, and D. D. Reid. 1976. "Chronic Cough in Young Adults in Relation to Smoking Habits, Childhood Environment and Chest Illness." *Respiration* 33: 236–244.
- Korenman, S., and D. Neumark. 1991. "Does Marriage Really Make Men More Productive?" *Journal of Human Resources* 26: 282–307.
- Lamb, M., ed. 1986. *The Father's Role: Applied Perspectives*. New York: John Wiley.
- Levine, D. B., and E. C. Bryant. 1997. "An Examination of Alternative Approaches to Selecting a Sample of New Births." Paper prepared for the National Center for Education Statistics, Office of Educational Research and Improvement. U.S. Department of Education.
- Lichter, D. T., F. B. LeClere, and D. K. McLaughline. 1991. "Local Marriage Markets and the Marital Behavior of Black and White Women." *American Journal of Sociology* 96: 843–867.
- Liebow E. 1967. *Tally's Corner: A Study of Negro Streetcorner Men*. Boston: Little, Brown and Company.
- Mare, R. D., and C. Winship. 1991. "Socioeconomic Change and the Decline of Marriage for Blacks and Whites." In *The Urban Underclass*, edited by C. Jencks and P. E. Peterson. Washington, DC: Brookings Institution. Pp. 175–202.
- Marsiglio, W., and R. Day. 1997. "Social Fatherhood and Paternal Involvement: Conceptual, Data, and Policymaking Issues." Presented at the NICHD conference on Fathering and Male Fertility: Improving Data and Research.
- McCormick, M. C., J. Brooks-Gunn, K. Workman-Daniels, J. Turner, and G. Peckham. 1992. "The Health and Developmental Status of Very Low Birthweight Children at School Age." *Journal of the American Medical Association* 267: 2204–2208.
- McLanahan, S., I. Garfinkel, J. Brooks-Gunn, and H. Zhao. 1998. "Fragile Families." Unpublished manuscript.
- McLanahan, S., and G. Sandefur. 1994. *Growing Up With a Single Parent*. Cambridge, MA: Harvard University Press.
- Moffitt, R. 1992. "Incentive Effects of the U.S. Welfare System: A Review." *Journal of Economic Literature* 30 (March): 1–61.
- Moffitt, R., ed. 1998. *The Effect of Welfare on Marriage and Fertility: What Do We Know and What Do We Need to Know? Welfare, the Family, and Reproductive Behavior*. Washington, DC: National Research Council, National Academy of Sciences.
- Monthly Vital Statistics Report. 1996. Vol. 46, No. 1 (Supplement).
<<http://www.cdc.gov/nchswww/fastats/birthwt.htm>> (4/1/99).

- Morris, C. N., et al. 1980. "The Theory and Practice of Obtaining Unbiased and Efficient Samples in Social Surveys." Rand Corporation.
- Nixon, L. A. 1997. "The Effect of Child Support Enforcement on Marital Dissolution." *Journal of Human Resources* 32: 159–181.
- Parke, R. D. 1995. "Fathers and Families." In *Handbook of Parenting*, Vol. 3: *Status and Social Conditions of Parenting*, edited by M. H. Bornstein. Mahwah, NJ: Erlbaum.
- Plotnick, R., I. Garfinkel, D. Gaylin, S. McLanahan, and I. Ku, 1998. "Better Child Support Enforcement: Can It Reduce Teenage Premarital Childbearing?" Paper presented at the annual meeting of the Population Association of America.
- Raphael, J., and R. M. Tolman. 1997. "Trapped by Poverty and Trapped by Abuse: New Evidence Documenting the Relationship Between Domestic Violence and Welfare: Executive Summary." Chicago: Taylor Institute.
- Rand California Statistics. 1998. <http://www.ca.rand.org/> (4/1/99).
- Rendall, M. S., L. Clarke, H. E. Peters, N. Ranjit, and G. Verropoulou. 1997. "Incomplete Reporting of Male Fertility in the United States and Britain." Paper presented at the annual meeting of the Population Association of America, Washington, DC.
- Rosenblum, L., and G. S. Pauly. 1984. "The Effects of Varying Environmental Demands on Maternal and Infant Behavior." *Child Development* 55: 305–314.
- Schultz, T. P. 1994. "Marital Status and Fertility in the United States: Welfare and Labor Market Effects." *Journal of Human Resources* 29: 636–69.
- Sorensen, E. 1995. "Noncustodial Fathers: Can They Afford to Pay More Child Support?" Unpublished manuscript. Washington, DC: Urban Institute.
- Texas Department of Health. 1999. Statistical Services Division, Bureau Vital Statistics.
- Texas Workforce Commission. 1999. Metropolitan Statistical Area Unemployment Rankings for June 1999.
<<http://www.twc.state.tx.us/lmi/lfs/type/unemployment/unemploymentmsarankcurrent.html>> (8/99)
- Urban Institute. 1999. Assessing the New Federalism. *National Survey of American Families, 1997*.
<http://newfederalism.urban.org/nsaf/income_a3.html> (3/1/99).
- U.S. Congress. 1998. *Green Book. Background Material and Data on Programs within the Jurisdiction of the Committee on Ways and Means*. Washington, DC: Government Printing Office. Table 7-14, available online at <<http://aspe.hhs.gov/98gb/intro.htm>>.
- Ventura, S. J., C. A. Bachrach, L. Hill, K. Kaye, P. Holcomb, and E. Koff. 1995. "The Demography of Out-of-Wedlock Childbearing." *Report to Congress on Out-of-Wedlock Childbearing*. Washington, DC: Department of Health and Human Services.

- Ventura, S. J., J. A. Martin, S. C. Curtin, and T. J. Mathews. 1997. *Report of Final Natality Statistics, 1996*. Monthly Vital Statistics Report, Vol. 46, No. 11 (Supplement). Hyattsville, MD: National Center for Health Statistics.
- Waite, Linda J. 1995. "Does Marriage Matter?" *Demography* 32: 483–507.
- Waller, Maureen. 1997. "Redefining Fatherhood: Paternal Involvement, Masculinity, and Responsibility in the 'Other America.'" Doctoral dissertation, Princeton University.
- Werner, E. W., and S. S. Smith. 1982. *Vulnerable but Invincible: A Longitudinal Study of Resilient Children and Youth*. New York: McGraw Hill.
- Willis, R. 1996. "Father Involvement: Theoretical Perspectives from Economics." Paper presented at the Conference on Father's Involvement. NICHD Family and Child Wellbeing Network. Bethesda, MD.
- Wilson, W. J. 1987. *The Truly Disadvantaged*. Chicago: University of Chicago Press.

TABLE 1
Fragile Families and Child Wellbeing Study
Nonmarital Births in Austin, Texas, and Oakland, California
Parents= Characteristics and Capabilities

	Austin, Texas		Oakland, California	
	Mothers	Fathers ^a	Mothers	Fathers ^a
Age				
<20	24%	11%	19%	9%
20B24	45%	41%	34%	30%
25B29	17%	24%	28%	29%
30+	15%	24%	19%	32%
Average Age Difference	2.53	2.53	2.81	2.81
Education				
Less than high school	45%	39%	52%	38%
High school only	28%	32%	31%	42%
Some college	22%	24%	15%	18%
College +	5%	4%	2%	2%
Worked Last Year	87%	85%	60%	77%
Race/Ethnicity				
White non-Hispanic	18%	14%	3%	2%
Black non-Hispanic	27%	32%	54%	57%
Hispanic	52%	50%	32%	33%
Other	2%	3%	11%	8%
Immigrant	20%	20%	30%	33%
Religious Affiliation				
Protestant	39%	36%	50%	40%
Catholic	43%	44%	29%	31%
Other religion	6%	10%	11%	13%
No religion	12%	10%	10%	16%
Other Children	59%	53%	68%	56%
Very Good Health	61%	73%	59%	63%
No Alcohol Use	91%	26%	83%	24%
No Drug Use	96%	82%	81%	74%

(table continues)

TABLE 1, continued

	Austin, Texas		Oakland, California	
	Mothers	Fathers ^a	Mothers	Fathers ^a
No Cigarette Use	81%	60%	76%	62%
Problems with Drugs/Alcohol	1%	9%	6%	6%
Total respondents	251	188	248	189

^aThe information about fathers= age education, work status, race and ethnicity, and drug and alcohol problems is based on mothers= reports. All other father information is based on self reports of fathers who were interviewed.

TABLE 2a
Fragile Families and Child Wellbeing Study
Nonmarital Births, Austin, Texas
Parents= Relationships and Attitudes about Marriage

	All Mothers	Mothers without Father Interview	Mothers with Father Interview	Fathers
Relationship Status				
Cohabiting	56%	17%	69%	73%
Not cohabiting - romantic	21%	19%	21%	20%
Not romantic - friends	9%	21%	5%	4%
Not romantic - no contact	14%	43%	5%	3%
Chances of Marriage (50% or greater)				
	67%	27%	81%	89%
Marriage Better for Kids				
Agree	51%	52%	51%	42%
Strongly agree	21%	21%	21%	38%
Successful Marriage (% very important)				
Friends	12%	8%	14%	16%
Husband steady job	90%	95%	89%	90%
Wife steady job	68%	71%	67%	47%
Same race/ethnicity	8%	10%	7%	11%
Good sex	27%	24%	28%	37%
Religion	27%	32%	26%	24%
Maturity	91%	94%	90%	86%
Sources of Conflict				
Money	19%	22%	18%	14%
Time	23%	27%	21%	15%
Sex	13%	19%	11%	7%
Pregnancy	14%	25%	11%	7%
Drinking/drugs	6%	8%	5%	3%
Being faithful	10%	17%	7%	9%
Total respondents	251	63	188	188

TABLE 2b
Fragile Families and Child Wellbeing Study
Nonmarital Births in Oakland, California
Parents= Relationships and Attitudes about Marriage

	All Mothers	Mothers without Father Interview	Mothers with Father Interview	Fathers
Relationship Status				
Cohabiting	47%	14%	58%	51%
Not cohabiting - romantic	39%	51%	35%	30%
Not romantic - friends	8%	12%	6%	6%
Not romantic - no contact	6%	24%	1%	2%
Don't know if cohabiting/romantic	0	0	0	12%
Chances of Marriage				
(50% or greater)	70%	39%	80%	82%
Marriage Better for Kids				
Agree	48%	41%	50%	51%
Strongly agree	22%	22%	22%	25%
Successful Marriage (% very important)				
Friends	21%	24%	20%	17%
Husband steady job	73%	66%	75%	89%
Wife steady job	54%	51%	55%	45%
Same race/ethnicity	20%	25%	19%	14%
Good sex	34%	39%	33%	44%
Religion	36%	36%	37%	34%
Maturity	74%	71%	75%	86%
Sources of Conflict				
Money	13%	8%	14%	12%
Time	16%	19%	15%	11%
Sex	8%	12%	7%	5%
Pregnancy	8%	15%	6%	3%
Drinking/drugs	6%	7%	5%	4%
Being faithful	11%	15%	10%	8%
Total respondents	248	59	189	189

TABLE 3a
Fragile Families and Child Wellbeing Study
Nonmarital Births in Austin, Texas
Indicators of Father=s Involvement with Child

	All Mothers	Mothers without Father Interview	Mothers with Father Interview	Fathers
Father=s Name on Birth Certificate	81%	50%	91%	95%
Child Will Have Father=s Surname	80%	45%	92%	96%
Father Contributed during Pregnancy				
Financial	72%	33%	85%	90%
Other	73%	30%	87%	89%
Want Father Involved	89%	67%	97%	98%
Total respondents	251	63	188	188

TABLE 3b
Fragile Families and Child Wellbeing Study
Nonmarital Births in Oakland, California
Indicators of Father=s Involvement with Child

	All Mothers	Mothers without Father Interview	Mothers with Father Interview	Fathers
Father=s Name on Birth Certificate	89%	67%	96%	96%
Child Will Have Father=s Surname	89%	72%	94%	96%
Father Contributed during Pregnancy				
Financial	83%	53%	92%	93%
Other	79%	51%	88%	91%
Want Father Involved	92%	71%	98%	100%
Total respondents	248	59	189	189

TABLE 4a
Fragile Families and Child Wellbeing Study
Nonmarital Births in Austin, Texas
Parents= Attitudes about Fatherhood

	All Mothers	Mothers without Father Interview	Mothers with Father Interview	Fathers
Defining a Good Father				
(% Most Important)				
Financial support	6%	5%	7%	9%
Teacher	9%	13%	7%	11%
Direct care	6%	8%	5%	14%
Show love	73%	63%	76%	58%
Protection	4%	8%	3%	3%
Authority	2%	3%	1%	4%
(% Least Important)				
Financial support	28%	37%	26%	26%
Teacher	6%	5%	7%	9%
Direct care	26%	27%	25%	13%
Show love	0%	0%	0%	2%
Protection	5%	2%	6%	6%
Authority	32%	27%	34%	41%
Total respondents	251	63	188	188

TABLE 4b
Fragile Families and Child Wellbeing Study
Nonmarital Births in Oakland, California
Parents= Attitudes about Fatherhood

	All Mothers	Mothers without Father Interview	Mothers with Father Interview	Fathers
Defining a Good Father				
(% Most Important)				
Financial support	10%	8%	11%	14%
Teacher	17%	17%	17%	26%
Direct care	7%	8%	6%	16%
Show love	58%	59%	58%	37%
Protection	2%	2%	2%	2%
Authority	5%	2%	6%	4%
(% Least Important)				
Financial support	27%	27%	28%	18%
Teacher	7%	10%	6%	7%
Direct care	23%	22%	24%	17%
Show love	0%	0%	1%	1%
Protection	9%	3%	11%	12%
Authority	31%	34%	30%	40%
Total respondents	248	59	189	189

TABLE 5
Fragile Families and Child Wellbeing Study
Nonmarital Births in Austin, Texas, and Oakland, California
Parents= Access to Resources: Personal, Household, and Kin

	<u>Austin, Texas</u>		<u>Oakland, California</u>	
	Mothers	Fathers	Mothers	Fathers
Total Personal Income (median)	\$4,000	\$12,500	\$5,000	\$12,500
Total Household Income (median)	\$14,050	\$21,275	\$15,780	\$21,100
Poverty Status				
<50% of poverty line	27%	19%	16%	12%
50%B100% of line	26%	18%	40%	25%
100%B200% of line	22%	24%	29%	37%
200%B300% of line	15%	20%	11%	12%
300% or more of line	10%	20%	4%	14%
Kin Resources				
Financial assistance	58%	33%	46%	17%
Housing assistance	41%	27%	44%	29%
Childcare assistance	36%		33%	
Potential help	97%	93%	92%	87%
Total respondents	251	188	248	189

TABLE 6
Fragile Families and Child Wellbeing Study
Nonmarital Births in Austin, Texas, and Oakland, California
Parents= Access to Resources: Personal, Household, and Kin

	<u>Austin, Texas</u>		<u>Oakland, California</u>	
	Mothers	Fathers	Mothers	Fathers
Neighborhood Resources				
Religious attendance	20%	11%	21%	12%
Neighborhood safety	82%	82%	76%	59%
Years in neighborhood (mean)	2.4	2.6	3	3.6
Government Transfers and Services				
Welfare or food stamps	43%	13%	52%	7%
Other government transfers	5%	3%	13%	12%
Housing subsidy	17%	11%	24%	15%
Awareness of Welfare and Child Support Rules (% lacking information)				
Years eligible for welfare	49%	60%	46%	68%
Work requirements	52%	60%	50%	72%
Voluntary paternity establishment	88%	91%	60%	66%
Total respondents	251	188	248	189